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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-9. (Canceled)

- 10. (Original) A method of generating a reproducible ligand profile for a given cell type, which cell type comprises a selected type of multi-ligand binding receptor, the method comprising:
- (a) providing a first sample of the given cell type, wherein the first sample comprises a first plurality of polypeptide ligands bound to the selected type of multi-ligand binding receptor;
 - (b) isolating the selected type of multi-ligand binding receptor from the first sample;
- (c) separating the first plurality of ligands from the selected type of multi-ligand binding receptor;
 - (d) fractionating the first plurality of ligands;
- (e) generating a first profile distinguishing among the first plurality of ligands on the basis of at least one chemical or physical attribute;
- (f) providing a second sample of the given cell type, the second sample being essentially identical to the first sample, wherein the second sample comprises a second plurality of polypeptide ligands bound to the selected type of multi-ligand binding receptor;
- (g) isolating the selected type of multi-ligand binding receptor from the second sample;
- (h) separating the second plurality of ligands from the selected type of multi-ligand binding receptor;

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(i) fractionating the second plurality of ligands;

(j) generating a second profile distinguishing among the second plurality of ligands on the basis of the at least one chemical or physical attribute; and

- (k) confirming that the first profile and the second profile are essentially identical, and together represent a reproducible ligand profile for the given cell type.
- 11. (Original) The method of claim 10, wherein a second chemical or physical attribute of each ligand is determined subsequent to the fractionation steps, and is represented in the profiles.
- 12. (Original) The method of claim 11, wherein a third chemical or physical attribute of each ligand is determined subsequent to the fractionation steps, and is represented in the profiles.
- 13. (Original) The method of claim 10, wherein the isolating and separating steps are accomplished using appropriate columns arranged in an in-line system.
- 14. (Original) A method of generating a ligand profile for a given type of cell, comprising:
- (a) providing a sample of lysate of the given type of cell, wherein the sample comprises a first plurality of polypeptide ligands bound to a first type of multi-ligand binding receptor and a second plurality of polypeptide ligands bound to a second type of multi-ligand binding receptor;
- (b) isolating the first and second types of multi-ligand binding receptors from the sample;
- (c) separating the first plurality of ligands from the first type of multi-ligand binding receptor and the second plurality of ligands from the second type of multi-ligand binding receptor;

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(d) fractionating the first plurality of ligands and the second plurality of ligands; and

(e) generating a first profile distinguishing among the first plurality of ligands on the basis of at least one chemical or physical attribute and a second profile distinguishing among the second plurality of ligands on the basis of the same at least one chemical or physical attribute.

15-16. (Canceled)

- 17. (Original) A method of comparing a first cell sample to a reference cell sample, comprising:
 - (a) producing a first ligand profile by a method comprising:
- (i) providing a first cell sample comprising a given type of multi-ligand binding receptor bound to a first set of polypeptide ligands;
- (ii) isolating the given type of multi-ligand binding receptor and the first set of ligands from the first cell sample;
- (iii) separating the first set of ligands from the given type of multi-ligand binding receptor;
- (iv) generating a first ligand profile distinguishing among the first set of ligands on the basis of at least one chemical or physical attribute;
- (b) providing a reference ligand profile representing a second set of polypeptide ligands extracted from the given type of multi-ligand binding receptor of a reference cell sample, wherein the reference ligand profile distinguishes among the second set of polypeptide ligands on the basis of the at least one chemical or physical attribute; and
- (c) comparing the first ligand profile to the reference ligand profile, in order to identify differences or similarities between the first cell sample and the reference cell sample.
- 18. (Original) The method of claim 17, wherein the reference cell sample consists essentially of healthy cells of an animal and the first cell sample comprises cells suspected of being diseased.

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19. (Original) The method of claim 17, wherein the first cell sample comprises cells cultured in the presence of a test compound, and the reference cell sample does not.

20. (Original) The method of claim 17, wherein the reference cell sample comprises cells cultured in the presence of a test compound, and the first cell sample does not.

21-42. (Canceled)